

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
1 April 2004 (01.04.2004)

PCT

(10) International Publication Number  
WO 2004/027144 A1

(51) International Patent Classification<sup>7</sup>: D21F 1/00

(21) International Application Number:  
PCT/IB2003/005024

(22) International Filing Date:  
18 September 2003 (18.09.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0221643.0 18 September 2002 (18.09.2002) GB

(71) Applicant (for all designated States except US): VOITH  
FABRICS PATENT GMBH [DE/DE]; St. Pöltener  
Strasse 43, 89522 Heidenheim (DE).

(72) Inventor; and

(75) Inventor/Applicant (for US only): VINES, Mack,  
Arthur [US/US]; 5253 August Avenue, Waycross, GA  
31503 (US).

(74) Agents: GOODWIN, Mark et al.; Wilson Gunn M'Caw,  
41-51 Cross Street, Royal Exchange, Manchester M2 7BD  
(GB).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG,  
SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,  
VN, YU, ZA, ZM, ZW.

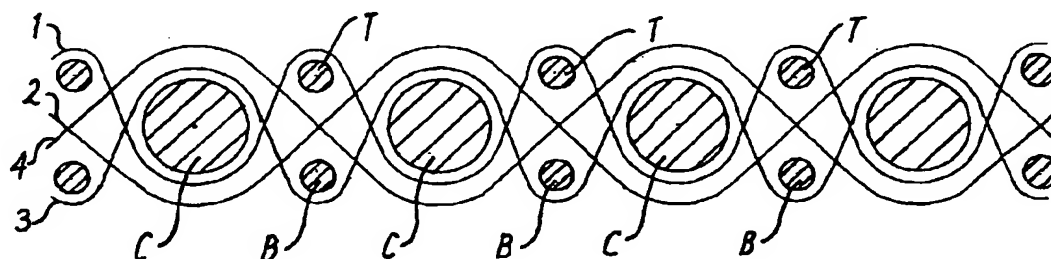
(84) Designated States (regional): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: PAPER MACHINE CLOTHING WITH WEAR-RESISTANT WEAVE



(57) Abstract: Papermachine clothing, having particular application as a dryer fabric, comprises machine direction (MD) yarns and cross-machine direction (CD) yarns interwoven in a repeat pattern, wherein the CD yarns are provided in two systems. The first CD yarn system comprises upper and lower yarns (T, B) and the second CD yarn system comprising a single yarn C. The first and second CD systems are provided alternatively throughout the fabric. The MD yarns are also provided in two systems, the first MD yarn system (2, 4) extending inbetween the upper (T) and lower (B) yarns of the first CD yarn system and over the single yarn (C) of the second CD yarn system. Individual yarns (1, 3) of the second MD yarn system extend over one of the upper or lower yarns of the first CD yarn system and the single yarn of the second CD yarn system. Two adjacent machine direction yarns (1, 2) from different MD yarn systems extend as a pair over the same CD yarn of the second CD yarn system with one (2) of said pair of MD yarns extending above the other (1) of said pair such that said other yarn (1) is protected from abrasion.

WO 2004/027144 A1